

Cultural ecosystem services and forestry

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What are cultural ecosystem services?

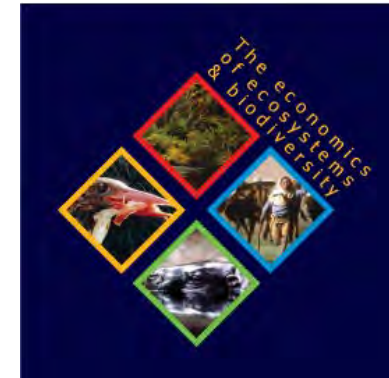
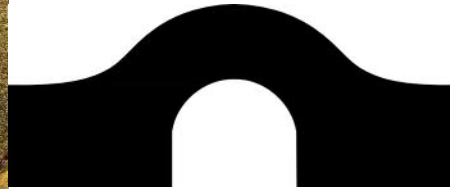
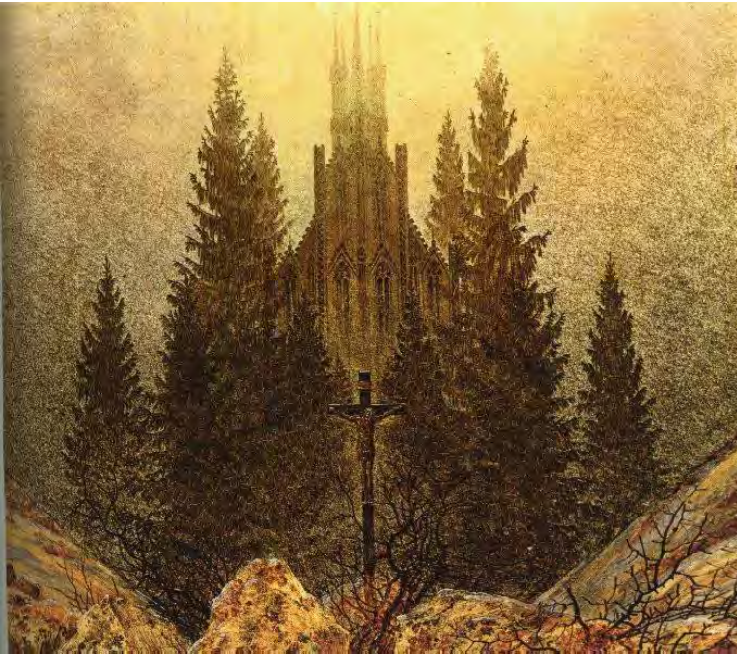
‘the nonmaterial benefits that people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experience, including, for example, knowledge systems, social relations, and aesthetic values,’

Millennium Ecosystem Assessment (MA) 2005)

The challenge

- To explore the cultural and social historian's views of forests, woods and trees and culture
- To better understand the antecedents of ecosystem services assessment and how they have looked at forests
- To critically appraise the ecosystem service concept with respect to cultural ecosystem services and forests, woods and trees
- 'In the current culture of providing measures of ecosystem services, inability to measure the cultural services... risks the possibility of those services being valued less' Norton et al 2012
- To take you on a journey that tries to bring together the social/cultural historian's (and maybe anthropologist's) views of culture and the ecosystem approach to cultural services

A need to bridge the gap



The social and cultural historian

The socio-ecological scientist

Schama's (the cultural historian's) view of the importance of forests woods and trees

- 'Forests are the primal birthplace of nations' (p11)
- Trees, woods and forests occupy a hugely significant role in many cultures that only become visible if we dig around and 'recover **the veins of myth and memory that lie beneath the surface**' (p10).
- These values are not immediately apparent in contemporary culture but they are deeply embedded and hugely important.
- This necessarily raises the question of whether their invisible importance will become apparent using the standard toolkits of social science and ecosystem services thinking

Forests woods and trees in less developed countries

Trees are hugely important culturally and spiritually in many developing countries

“As traditional forest dwellers, the Gonds believe that trees are central to life. During the day the trees work hard, providing shade, shelter and nourishment for all. But at night when all the daytime visitors have left, the spirits in the trees reveal themselves.”

From the Night Life of Trees (2006)



The holy Dumar tree, whose fruits look like little birds, is worshipped for nine nights during the festival of Navrati. It blesses marriages where wood its wood is used to make the wedding canopy.

Yoruba Sacred Grove Nigeria



Occasionally we can see flash-backs to this former importance



A Cornish cloutie well

These are Celtic healing wells, found throughout the Celtic fringe of Europe at which local people still hang pieces of cloth on adjacent trees believing in their healing qualities

The green man: an uncertain link between paganism and Christianity?



Tree of life in typanum, Kilpeck



Green man Kilpeck



Green man Sutton Benger

The green man, and trees in general, are associated with immortality/rebirth and renewal, with the yew, a particularly important species

Trees in Art





Breughel's 'Gloomy day'

Note the extent to which the trees are part of a peopled, living landscape. They are in our being and of our being

Trees in contemporary art and sculpture



Forests, Woods and Trees in literature and poetry

Poetry

‘Where ignorance and wealth
their course pursue,

Each tree must tumble
down.’

John Clare c 1800

‘These woods are lovely, dark
and deep.’

Robert Frost c 1930

Children’s literature

Ambiguity and threat

The Brothers Grimm

In JK Rowling’s Harry Potter
there is a forbidden forest
which is ‘home to a wide and
strange assortment of
creatures. Anything wild and
dangerous that needs a place
to live is put there.’

Forests woods and trees in everyday life

‘No tool or agricultural implement could be fashioned, no fence made to protect crop or stock, no baskets made of any strength, no mine sunk below ground, no machinery devised for milling, draining, spinning, weaving that did not utilise wood.’

Smout, 2005



In the absence of direct dependence on trees people still protect them vigorously

An interim conclusion on the historian's view

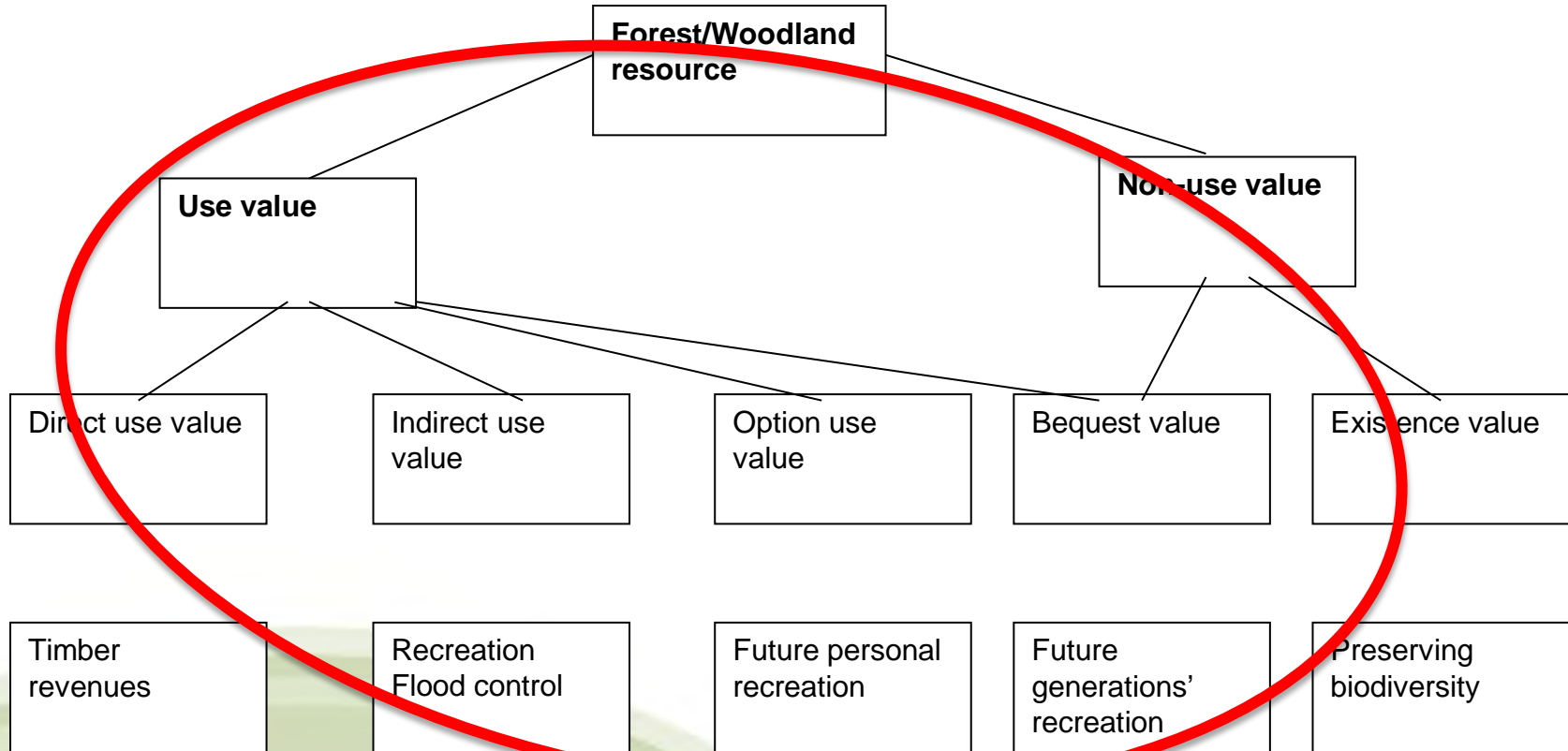
- If we take a 'high culture view' forest woods and trees are highly important symbols in art, sculpture, literature and poetry
- If we take an everyday life 'low culture view', trees remain highly important objects which are both used and respected, but utilitarian use has faded.

So forests woods and trees DO have real importance

The antecedents of ecosystem services thinking

- The recognition of positive externalities in land use
- The widespread use of the externalities rationale in supporting forestry
- Many studies of forest-related externalities include some cultural ecosystem services
- Many studies showing that the benefits to society extend beyond the notional pounds/euros of value to green infrastructure underpinning rural development and deeper cultural values are sometimes acknowledged

Types of economic value associated with forest and woodland



after Bateman and Turner 1993

Major studies indicate economic value of 'cultural services'

Willis' estimates of non-market values of GB forestry

Environmental Benefit	Annual value £ million
Recreation	393
Landscape	150
Biodiversity	386
Carbon sequestration	93
Air pollution absorption	0.4
TOTAL	1023

A wide range of techniques has been developed

■ Revealed preferences

- Clawson approach
- Hedonic pricing

■ Expressed preferences

- Contingent valuation
- Choice models

■ **BUT DOUBTS REMAIN-** are there just informal recreational and landscape values under cultural services?

Forests woods and trees and the ecosystem services approach

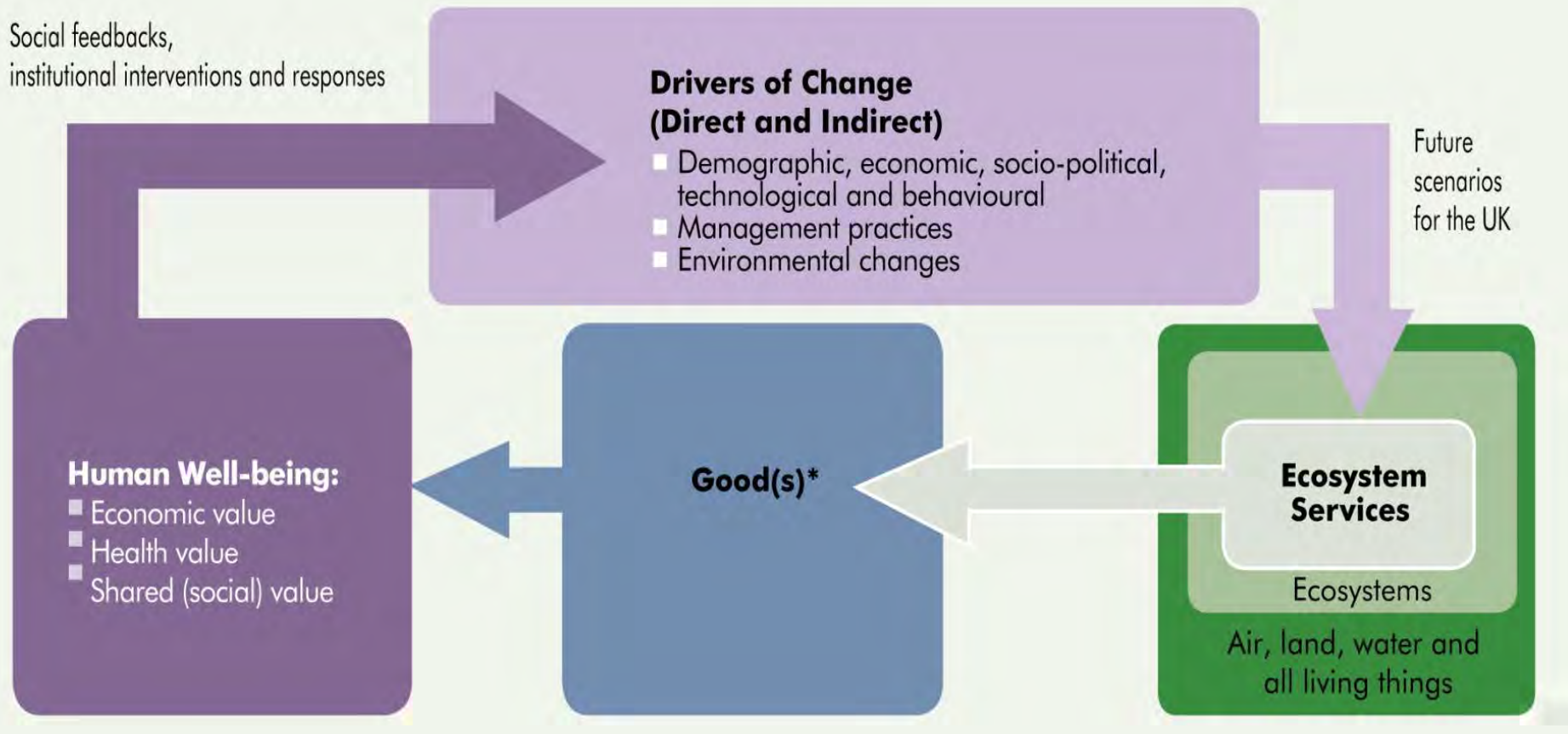


Our interest is the difficult-to-measure bit

The UK National Ecosystem Assessment

- A just-completed national study underpinned by the same logic as the MA
- Assertion of the existence of three sorts of value
 - Economic value
 - Health values
 - Shared social value
- Recognition of difficulties in aggregation (as also found in TEEB)

Conceptual Framework NEA UK – evolution from the EA



Conceptual Framework – focus on well-being

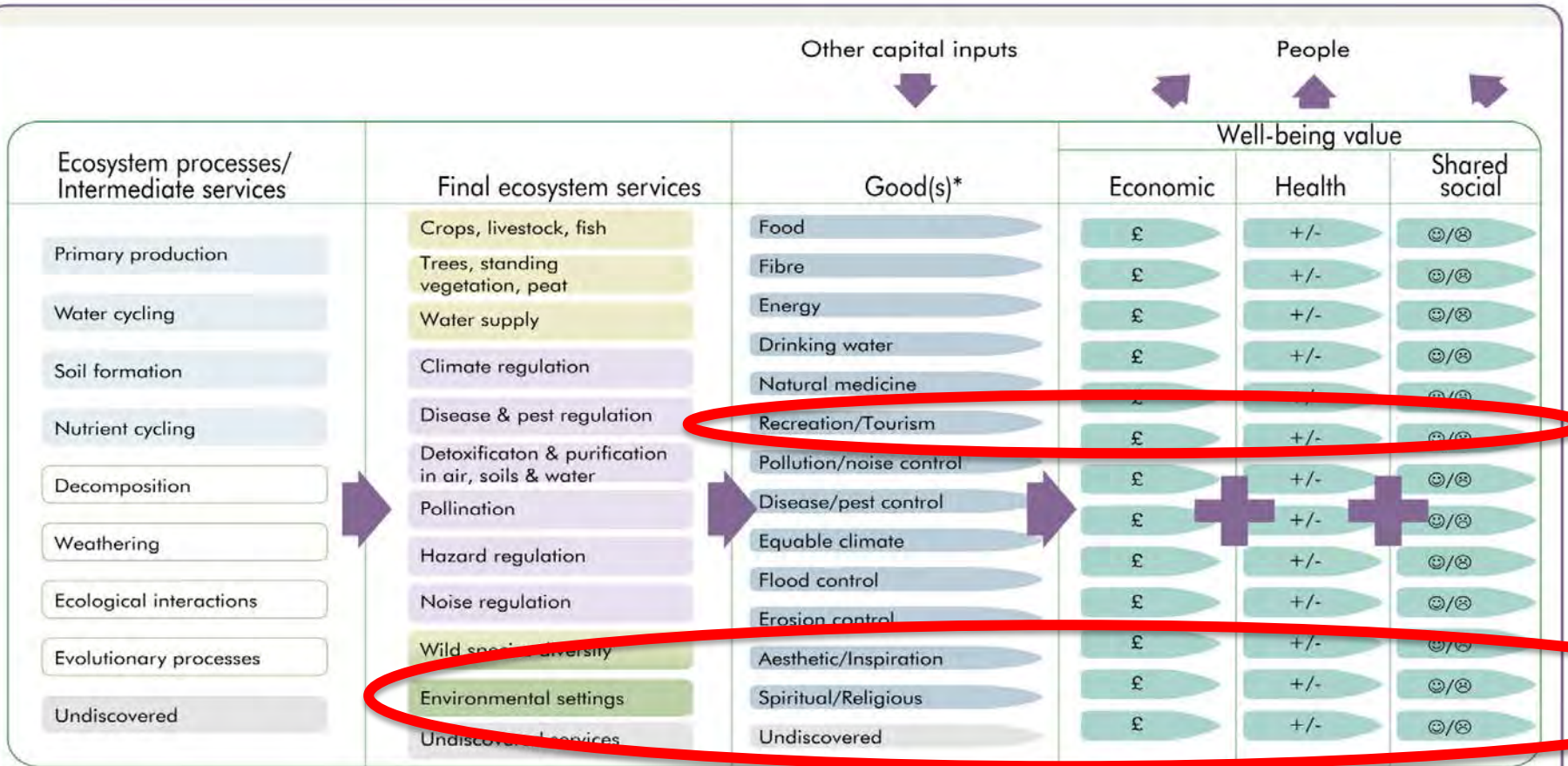


Figure 10 The full set of ecosystem processes, services, goods/benefits and values used in the UK NEA. Note that some ecosystem services can be both intermediate and final services. For simplicity, in this figure, services are shown only in the most final position that they occupy. Services such as pollination and climate regulation that also play important roles further back in the chain are not represented here. Cells with no colour are ecosystem processes/services that were not in the Millennium Ecosystem Assessment classification. *Note that the term good(s) includes all use and non-use, material and non-material outputs from ecosystems that have value for people. Source: adapted from Fisher *et al.* (2008).

Some benefits of the ecosystem approach

- We can build a much more holistic overview of what forests, woods and trees deliver for society
- We are forced to recognise the multiple ways in which particular rural land uses deliver benefits for society
- We recognise a plurality of values
- We can begin to make trade offs between different types of ecosystem service

Some challenges arising from the ecosystem approach

- We do not have common values to trade off
- We need to separate out anthropogenic additions to value from the intrinsic value of the resource under scrutiny
- Boyd and Banzhaf (2006), assert that the MA categorisation is problematic: “cultural services, including spiritual and religious values, aesthetic values, and recreation and ecotourism, are particularly unsatisfying. These things are benefits and very generic categories at that.”
- Some values are hard to place: gathering porcini is a social and cultural act; it is about knowing a place and often being part of a place but it is also a provisioning service

Conclusions

- In western and eastern societies, forests, woods and trees, occupy a position of great prominence in cultural values associated with the natural environment
- That cultural significance may even grow with the emergent issues of climate change and the key role of forests (REDD + etc.). The pre-industrial centrality may reassert itself
- The cultural and social historian's and anthropologist's lens gives us a powerful means through which to explore the values of forests, woods and trees
- The Ecosystem Services lens is by no means unproblematic but helps us to build a more holistic picture
- The ecosystem approach is perhaps weakest in its analysis of cultural services and this applies particularly to forests, woods and trees
- We **can and should** build social sciences methods (deliberative approaches) which allow deeper probing of these cultural values without the necessity of economic reductionism
- We **cannot and must not** underestimate how strongly these cultural values ultimately create markets



Thank you

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